

Claims

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CLAIMS:

1. A transaction system for use by a plurality of users, comprising:
a plurality of electronic tokens for storing and processing token transaction data and token reward data, each of said electronic tokens for use by a respective user;
a computer server for storing and processing server transaction data and server reward data associated with each of said respective tokens; and
a plurality of user interaction devices for communicating with said server, at least one of which is provided with a token acceptor device for reading from and writing to said tokens;
wherein said server transaction data and said token transaction data are indicative of at least one transaction and said server and token reward data are indicative of rewards or entitlements earned or otherwise awarded, and said system is operable to transfer, for a respective token, server reward data from said server to said respective token and token reward data from said respective token to said server by means of said user interaction device provided with a token acceptor device, whereby said rewards or entitlements are redeemable either according to reward data stored on said token or according to reward data stored on said server.
2. A system as claimed in claim 1, wherein said system is operable by each of said users 1) to transfer reward data from said server to a respective token of said respective user so that said respective user can redeem said rewards or reward points by presentation of said token, and 2) to transfer reward data from a respective token of said respective user to said server so that said respective user can redeem said rewards or reward points by communicating with said server.
3. A system as claimed in claim 1, wherein each of said tokens is additionally adapted to store token user data pertaining to said respective user.
4. A system as claimed in claim 3, wherein said server is additionally adapted to store server user data pertaining to said respective user, and said system is operable to synchronize said token user data with said server user data for a respective user when the respective token of said user is used with one of said user interaction devices having a token acceptor device.
5. A system as claimed in claim 1, wherein each of said tokens is any one of: a smart card, a chip in a mobile telephone, a chip in a personal digital assistant, a chip in a watch, and a chip in a key chain, wherein each of said tokens is operable to interact with said token acceptor device.
6. A system as claimed in claim 1, wherein said transaction data includes, for each transaction, unique transaction identification data.

7. A system as claimed in claim 1, wherein said system is operable to transfer data between said server and said tokens so that said system can reconcile said transaction data or said reward data.
8. A system as claimed in claim 1, wherein said user interaction devices are provided with processing software for recording said transaction data and said reward data relating to said transaction in said user interaction device, and to record said transaction data only in said tokens when said tokens are presented at said user interaction devices in the course of a transaction or activity.
9. A system as claimed in claim 8, wherein said system is operable to transmit said transaction data and said respective reward data for each of said transaction records in said user interaction device to said server, and said server is operable to check said transaction data for duplicates, to discard duplicates, to record said transaction data that are not duplicated and to accumulate said respective reward data in said server reward data.
10. A system as claimed in claim 8, wherein said transaction or activity comprises any one of: a purchase transaction, a payment transaction, a cash withdrawal transaction, a transaction to consume or redeem an entitlement, a visit, a subscription to a service, a use of a service, a retrieval of information, a request for information, a submission or provision of information, an application for membership, an access to a web page, a participation in an event, and a registration of a particular activity.
11. A system as claimed in claim 1, wherein each of said tokens is further adapted to store redemption data indicative of previously redeemed rewards or reward points.
12. A system as claimed in claim 11, wherein said user interaction devices are provided with processing software for computing an available balance of entitlements from at least some of said token transaction data, said redemption data, and said token reward data.
13. A system as claimed in claim 1, wherein said user interaction devices are operable to display or print an available balance of entitlements.
14. A system as claimed in claim 1, wherein said user interaction devices are operable to prompt a respective one of said users for an input indicative of whether said respective user wishes to redeem any reward according to an available balance of entitlements in an instant transaction.
15. A system as claimed in claim 1, wherein said server is configured to receive transaction data from said tokens, to compare said received transaction data with previously received transaction data, to discard any duplicated transaction data, and to form a reconciled set of transaction data wherein said reconciled set of transaction data constitutes said server

transaction data.

16. A system as claimed in claim 9, wherein each of at least some of said user interaction devices is equipped with a token acceptor device for retrieving said token transaction data from any of said tokens when said respective token is next used at one of said user interaction devices so equipped, and said respective user interaction device is configured to compute any rewards for a previous transaction, the resulting rewards data being sent to said server with said transaction data, whereby said server receives said transaction data and said reward data at least twice.

17. A system as claimed in claim 1, wherein said system is configured to reconcile said token transaction data and said token reward data with said server transaction data and said server reward data when any of said respective tokens is used with a user interaction device provided with a token acceptor device for reading from and writing to said tokens.

18. A system as claimed in claim 1, wherein said system is configured to upload said token transaction data of a respective token to said server and thereby synchronize said respective token with said server, when said token is used with a user interaction device in online mode and provided with a token acceptor device for reading from and writing to said token, where said token transaction data in said respective token had been added to said token when previously used with a user interaction device equipped with a token acceptor device, and where said token transaction data has not been previously transmitted to said server.

19. A system as claimed in claim 1, wherein said server is configured to receive transaction and activity data corresponding to transactions or activities of a respective user on other business systems without using the respective token of said user, for determining rewards or entitlements to be awarded for said transactions and said activities, and recording the balance of such entitlements in said server reward data corresponding to said respective user.

20. A system as claimed in claim 1, wherein said system is configured to associate a respective username and password combination with each respective token, so that the respective user associated with said respective token can access said server reward data pertaining to said token by communication with said server and without said respective token.

21. A system as claimed in any one of the preceding claims, wherein when said token reward data of a respective token is transferred to said server, said transferred token reward data is incorporated into said respective server reward data pertaining to said respective token, and removed from said respective token.

- 22. A system as claimed in any one of the preceding claims, wherein when said server reward data corresponding to a respective token is transferred to said respective token, said transferred server reward data is incorporated into said respective token reward data of said respective token, and removed from said server.**
- 23. A system as claimed in any one of the preceding claims, for use by a plurality of Providers of goods, services or both goods and services**
- 24. A system as claimed in any one of the preceding claims, for use by a plurality of groups of Providers, each group comprising one or more Providers, each of said groups providing a set of entitlements to said users, and each of said groups having its own set of business rules for awards and redemptions of entitlements, wherein reward data information of said set of entitlements is kept in each of said tokens and, for each of said set of entitlements, said server holds one set of offline reward data and one set of server reward data.**
- 25. A system as claimed in any one of the preceding claims, wherein rewards can be transferred from a first of said tokens to a second of said tokens by transferring either token reward data or server reward data from said first to said second token.**
- 26. A system as claimed in claim 25, wherein said transfer is effected by means of one or more of said user interaction devices configured to transmit information about said transfer to said server for updating the server reward data corresponding to said first token and said second token.**
- 27. A system as claimed in any one of the preceding claims, wherein said user interaction devices are located in a plurality of countries, said countries collectively employ a plurality of currencies, and said user interaction devices in each of said countries transact in a respective local currency, and wherein said tokens contain entitlement information based on said token reward data converted to the local currency of the respective user interaction device by said user interactive device or by said server so that an entitlement can be redeemed in a respective country.**
- 28. A system as claimed in any one of the preceding claims, wherein said system is configured to convert entitlement information awarded by a respective said user interaction device in a local currency to the currency of said respective token.**
- 29. A system as claimed in any one of the preceding claims, wherein each group of a plurality of groups of Providers maintains in each of said tokens profile data relating to said respective group and of a user of said respective token, wherein a first of said groups of Providers can establish a business relationship with a second of said groups for the purpose of sharing the**

whole or parts of said profile data relating to said second Group, and ask a particular user at one of said user interaction devices of said first Group, during a transaction or activity, for permission to use said profile data for making an offer relevant to said respective user according to business rules encoded in said user interaction device, wherein user interaction device is provided with a token acceptor device for reading from and writing to said tokens and said user of said respective token can indicate consent by entering a password or PIN, which is used by said user interaction device to access said profile data.

30. A system as claimed in claim 1, wherein said system is operable to allow a first of said users to leave a standing instruction recorded in said server to transfer entitlements from said server reward data to credit a specified account.

31. A system as claimed in claim 30, wherein said specified account is adapted to receive said transferred entitlements as payments of insurance premiums, for telecom bills, utility bills, outstanding loans or for other goods or services, the reward data of another set of entitlements of the same user or the reward data of another set of entitlements of another user, and said transfer can be effected on a regular basis or when a set of specified conditions are met.

32. A system as claimed in any one of the preceding claims, wherein said transaction comprises an activity, said server transaction data comprises server activity data and said token transaction data comprises token activity data.

33. A method for performing transactions by a plurality of users, comprising:

providing a plurality of electronic tokens for storing and processing token transaction data and token reward data, each of said electronic tokens for use by a respective user;

providing a computer server for storing and processing server transaction data and server reward data associated with each of said respective tokens; and

providing a plurality of user interaction devices for communicating with said server, at least one of which is provided with a token acceptor device for reading from and writing to said tokens;

wherein said server transaction data and said token transaction data are indicative of at least one transaction and said server and token reward data are indicative of rewards or entitlements earned or otherwise awarded, and said system is operable to transfer, for a respective token, server reward data from said server to said respective token and token reward data from

said respective token to said server by means of said user interaction device provided with a token acceptor device, whereby said rewards or entitlements are redeemable either according to reward data stored on said token or according to reward data stored on said server.

34. A method as claimed in claim 33, including additionally providing each of said tokens with token user data pertaining to said respective user.

35. A transaction system for use by a plurality of users, comprising:
a plurality of electronic tokens for storing and processing token activity data and token reward data, each of said electronic tokens for use by a respective user;

a computer server for storing and processing server activity data and server reward data associated with each of said respective tokens; and

a plurality of user interaction devices for communicating with said server, at least one of which is provided with a token acceptor device for reading from and writing to said tokens;

wherein said server activity data and said token activity data are indicative of at least one activity and said server and token reward data are indicative of rewards or entitlements earned or otherwise awarded, and said system is operable to transfer, for a respective token, server reward data from said server to said respective token and token reward data from said respective token to said server by means of said user interaction device provided with a token acceptor device, whereby said rewards or entitlements are redeemable either according to reward data stored on said token or according to reward data stored on said server.